

his

(FILE 'HOME' ENTERED AT 13:30:30 ON 01 FEB 2001)

INDEX 'ADISALERTS, ADISINSIGHT, AGRICOLA, ANABSTR, AQUASCI, BIOBUSINESS,  
BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CANCERLIT,  
CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE,  
DRUGB, DRUGLAUNCH, DRUGMONOG2, DRUGNL, ...' ENTERED AT 13:30:36 ON 01

FEB

2001

SEA WNT(10W) (LIGAND OR BIND?)

-----  
5 FILE AQUASCI  
48 FILE BIOSIS  
6 FILE BIOTECHABS  
6 FILE BIOTECHDS  
40 FILE BIOTECHNO  
3 FILE CABA  
34 FILE CANCERLIT  
55 FILE CAPLUS  
42 FILE DGENE  
3 FILE EMBAL  
43 FILE EMBASE  
41 FILE ESBIOBASE  
9 FILE GENBANK  
1 FILE IFIPAT  
29 FILE LIFESCI  
43 FILE MEDLINE  
2 FILE NTIS  
12 FILE PASCAL  
48 FILE SCISEARCH  
4 FILE TOXLINE  
16 FILE TOXLIT  
9 FILE USPATFULL  
7 FILE WPIDS  
7 FILE WPINDEX

L1

QUE WNT(10W) (LIGAND OR BIND?)

-----  
SEA L1 AND SDF

L2

QUE L1 AND SDF

-----  
SEA WNT AND SDF

-----  
3 FILE CAPLUS  
1 FILE ESBIOBASE  
1 FILE SCISEARCH

L3

QUE WNT AND SDF

-----

FILE 'CAPLUS, ESBIOBASE, SCISEARCH' ENTERED AT 13:36:56 ON 01 FEB 2001

L4

5 S WNT AND SDF

L5

4 DUP REM L4 (1 DUPLICATE REMOVED)

L6

36 S L1 AND WNT(25W)SECRET?

L7

18 DUP REM L6 (18 DUPLICATES REMOVED)

L7 ANSWER 9 OF 18 SCISEARCH COPYRIGHT 2001 ISI (R)  
AN 1999:186627 SCISEARCH  
GA The Genuine Article (R) Number: 170NW  
TI Identification of a Frizzled-like cysteine rich domain in the extracellular region of developmental receptor tyrosine kinases (vol 7, pg 1632, 1998)  
AU Saldanha J; Singh J (Reprint); Mahadevan D  
CS DEPT DRUG DESIGN & EVALUAT, CAMBRIDGE CTR 12, CAMBRIDGE, MA 02142 (Reprint); NATL INST MED RES, DIV MATH BIOL, LONDON NW7 1AA, ENGLAND; BIOGEN INC, CAMBRIDGE CTR 14, CAMBRIDGE, MA 02142; UNIV LONDON BIRKBECK COLL, LONDON WC1E 7HX, ENGLAND  
CYA USA; ENGLAND  
SO PROTEIN SCIENCE, (AUG 1998) Vol. 7, No. 8, pp. 1843-&. Publisher: CAMBRIDGE UNIV PRESS, 40 WEST 20TH STREET, NEW YORK, NY 10011-4211.  
ISSN: 0961-8368.  
DT Errata; Journal  
FS LIFE  
LA English  
REC Reference Count: 19  
\*ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS\*  
AB In *Drosophila*, members of the Frizzled family of tissue-polarity genes encode proteins that appear to function as cell-surface receptors for Wnts. The Frizzled genes belong to the seven transmembrane class of receptors (7TMR) and have on their extracellular region a cysteine-rich domain that has been implicated as the **Wnt binding** domain. This region has a characteristic spacing of ten cysteines, which has also been identified in FrzB (a **secreted** antagonist of Wnt signalling) and Smoothened (another 7TMR, which is involved in the hedgehog signalling pathway). We have identified, using BLAST, sequence similarity between the cysteine-rich domain of Frizzled and several receptor tyrosine kinases. which have roles in development. These include the muscle-specific receptor tyrosine kinase (MuSK), the neuronal specific kinase (NSK2), and ROR1 and ROR2. At present, the ligands for these developmental tyrosine kinases are unknown. Our results suggest that Wnt-like ligands may **bind** to these developmental tyrosine kinases.  
AB . . . transmembrane class of receptors (7TMR) and have on their extracellular region a cysteine-rich domain that has been implicated as the **Wnt binding** domain. This region has a characteristic spacing of ten cysteines, which has also been identified in FrzB (a **secreted** antagonist of Wnt signalling) and Smoothened (another 7TMR, which is involved in the hedgehog signalling pathway). We have identified, using . . . (NSK2), and ROR1 and ROR2. At present, the ligands for these developmental tyrosine kinases are unknown. Our results suggest that Wnt-like ligands may **bind** to these developmental tyrosine kinases.

L7 ANSWER 12 OF 18 Elsevier BIOBASE COPYRIGHT 2001 Elsevier Science B.V.  
DUPLICATE

AN 1998276141 ESBIOBASE

TI sFRP-2 is a target of the Wnt-4 signaling pathway in the developing metanephric kidney

AU Lescher B.; Haenig B.; Kispert A.

CS A. Kispert, Max Planck-Institut Immunbiologie, Stubeweg 51, 79108 Freiburg, Germany.  
E-mail: kispert@immunbio.mpg.de

SO Developmental Dynamics, (1998), 213/4 (440-451), 38 reference(s)  
CODEN: DEDYEI ISSN: 1058-8388

DT Journal; Article

CY United States

LA English

SL English

AB Members of the Wnt family of **secreted** glycoproteins act as short-range signaling molecules in vertebrate embryogenesis. Previous work has shown that Wnt-4 is required for kidney development. Mice lacking functional Wnt-4 fail to form pretubular cell aggregates. Wnt-4 acts as an autoinducer of the mesenchymal to epithelial transition ion underlying nephron development. We have identified a member of the gene family encoding **secreted** frizzled related proteins (sFRP), putative Wnt antagonists, that shows overlapping expression with Wnt-4 in aggregating mesenchyme and simple epithelial bodies during metanephric development. sFRP-2 expression is absent in metanephric mesenchyme of kidneys mutant for Wnt-4 and is coinduced with Wnt-4 in isolated metanephric mesenchyme by cells expressing Wnt-4. The cysteine-rich domain of sFRP-2 **binds** to Wnt-4 as shown by coimmunoprecipitation experiments. Hence, sFRP-2 is a target of the Wnt-4 signaling pathway in the metanephric kidney and may modulate Wnt-4 signaling. sFRP-2 expression is highly dynamic and specific during other aspects of embryogenesis. sFRP-2 is expressed in subpopulations of ependymal cells in spinal cord and brain, in the developing eye, in limb bud mesenchyme, in the heart, and strongly in skeletogenic condensations of facial bones, suggesting widespread interaction with other members of the Wnt gene family during embryogenesis.

AB Members of the Wnt family of **secreted** glycoproteins act as short-range signaling molecules in vertebrate embryogenesis. Previous work has shown that Wnt-4 is required for kidney development. Mice lacking functional Wnt-4 fail to form pretubular cell aggregates. Wnt-4 acts as an autoinducer of the mesenchymal to epithelial transition ion underlying nephron development. We have identified a member of the gene family encoding **secreted** frizzled related proteins (sFRP), putative Wnt antagonists, that shows overlapping expression with Wnt-4 in aggregating mesenchyme and simple epithelial bodies. . . in metanephric mesenchyme of kidneys mutant for Wnt-4 and is coinduced with Wnt-4 in isolated metanephric mesenchyme by cells expressing Wnt-4. The cysteine-rich domain of sFRP-2 **binds** to Wnt-4 as shown by coimmunoprecipitation experiments. Hence, sFRP-2 is a target of the Wnt-4 signaling pathway in the metanephric. . .